

ABSTRACT OF THE DISCLOSURE

An indoor air quality module includes an ultraviolet light source located between two titanium dioxide coated honeycombs. Photons of ultraviolet light are absorbed by the titanium dioxide coating to form reactive hydroxyl radicals that attack and oxidize contaminants in the to water, carbon dioxide, and other substances. An outer compartment is attached to an air duct and an HVAC unit, and an inner compartment supports the honeycombs, a particle filter, and the ultraviolet light source. When the module is in the working position and the honeycombs and the particle filter are correctly installed, the components contact switches on the outer compartment, and the ultraviolet light source is activated. When the inner compartment is pivoted relative to the outer compartment during servicing or if any of the components are incorrectly installed or not installed, one of the components does not engage the corresponding switch, deactivating the ultraviolet light source.

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